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Takuya Matsumoto

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WENDEROTH, LIND & PONACK, L.L.P.

2033 K STREET N. W.

SUITE 800

WASHINGTON, DC 20006-1021

EXAMINER

GORMAN, DARREN W

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Drawings

1. The replacement drawing sheets for Figures 1-4 were received on December 3, 2008. These drawings are acceptable.

Specification

2. The substitute specification filed December 3, 2008 is hereby acknowledged and has been entered.

Minor Claim Suggestions By Examiner

3. The following change is recommended to improve clarity of the claims. The claims have been examined on the merits including the suggested change below.
 - In claim 16, on line 8, --of-- should be inserted between “barrel” and “the spray gun”.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Regarding claim 16, on lines 16-17, the recitation, "the external electrode as a whole being formed of an insulative material" is unclear. An electrode, by definition, must be capable of conducting electricity, thus it is not possible for the claimed electrode to be "wholly" formed from insulative material.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 16-20 are rejected as well as the claims are understood by the Examiner under 35 U.S.C. 103(a) as being unpatentable over Luderer et al., USPN 3,937,401.

Luderer shows and discloses several embodiments (see Figures 1-6) of an electrostatic paint spray gun which are expressly disclosed as having characteristics which can be combined with one another (see column 5, lines 66-68), the spray gun having a pistol-shaped body (see column 3, line 13) with a barrel portion (10) including an atomizer nozzle (11) at a forward end thereof and an external charging electrode (15) disposed within an electrode body (14, 34, 34a, 34b, 34c) made from an insulative material (see column 3, lines 25-26; and column 4, lines 47-48), wherein the charging electrode includes an exposed portion (12) which is projected ahead of the atomizer nozzle. Luderer further shows the electrode body having a plug-in portion at a rear end thereof, which is removably plugged into an electrode receptacle (in the region of reference numbers 21a and 21b for Figure 1, and at reference number 30 for the other shown

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Figures; see also column 4, lines 46-48), the receptacle being located at an outer portion of the spray gun barrel, the plug-in portion having a connecting terminal (16 for Figure 1, and 35 for the other shown Figures) which connects to an electrical connecting portion (17 for Figure 1, and 36 for the other shown Figures) at a bottom of the receptacle, the electrical connecting portion being connected to a high-voltage output (13). Luderer also shows a first high-resistance resistor (13a) between the high-voltage output (13) and the electrode receptacle, and a second high-resistance resistor (41 – see Figure 5), which is disclosed as optionally being provided within the electrode body (see column 5, lines 40-42), thus being provided at the forward-end of the electrode. Further, Luderer discloses that the electrode body may be made from a bendable, resilient material (see column 5, lines 28-33). Also, the electrode body shown in the embodiments of Figures 2, 5 and 6 clearly include portions which are narrower in thickness when compared to the portion connected at the electrode receptacle. Thus, it is reasonable to say that the portion(s) which are narrower in thickness are lower in strength than the electrode receptacle portion.

As to the newly presented recitations of the external electrode including an engagement piece and the electrode receptacle including a retention recess, and the functional relationships thereof, with respect to the embodiment of Luderer shown in Figure 1, the sealing gaskets residing within the recesses (21a, 21b) reasonably read on the engagement piece and retention recess, respectively. With respect to the embodiments shown in at least Figures 2, 4 and 6, Luderer shows an annular seal (38), which reasonably reads on the claimed engagement piece, the seal engaging a recessed portion of the electrode receptacle where the electrode protrudes from the gun when the plug-in portion of the electrode is plugged into the electrode receptacle.

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However, the disclosure of Luderer concentrates on the features at the spraying/charging end of the apparatus, thus the disclosure is silent as to the gun including “an electroconductive grip”.

It is old and well-known in the art to form the grip portion of a pistol-shaped electrostatic spray gun from a material which would result in the grip being an “electroconductive grip”, thus providing a grip having ground potential when held by the user. Indeed, by Applicant’s own admission (see specification, page 12, lines 17-18), such an electroconductive grip is “conventional”. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the non-descript grip portion of the gun disclosed by Luderer, from a material which would result in the grip being an electroconductive grip, as is well known in the art, thus providing a grip having ground potential when held by the user, and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious choice. *In re Leshin*, 125 USPQ 416 (CCPA 1960).

Allowable Subject Matter

8. Claims 21-23 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter:

The prior art, alone or in combination, did not show or teach an electrostatic spray gun having an electrode body with a plug-in portion having a plurality of grooves formed along an outer surface of the plug-in portion so as to define a plurality of projections, the plug-in portion

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being attachable to the electrode receptacle by inserting the projections of the plug-in portion into respective grooves of the electrode receptacle and by inserting the projections of the electrode receptacle into respective grooves of the plug-in portion, wherein a corrugated boundary surface formed by outer surfaces of the grooves and projections of the electrode receptacle and the plug-in portion is defined between an exposed end of the outer surface of the plug-in portion and an electrical connection formed between the connecting terminal and the electrode receptacle so as to provide a long creepage distance, together with the other recited limitations as set forth in claim 21.

Response to Arguments

10. Applicant's arguments, see page 8, line 14 through page 9, line 19, of the "Remarks" section of the response filed December 3, 2008 regarding newly presented claim 16 in view of the prior art to Luderer et al. (US Patent No. 3,937,401), have been fully considered but they are not persuasive. As set forth under paragraph 7 of this office action, it is believed by the Examiner that each limitation recited in claim 16 is anticipated or rendered obvious by the prior art to Luderer et al.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on 571-272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Darren W Gorman/
Primary Examiner, Art Unit 3752

/D. W. G./
Primary Examiner, Art Unit 3752